

engine model from an outboard or personal watercraft family. Such emission credits that you generate under this part 1045 may be used for averaging, but not for banking or trading. The FEL caps for such jet boat families are the HC+NO_x and CO standard for outboard and personal watercraft engines. U.S.-directed sales from jet boat engines using the provisions of this paragraph (d) may not be greater than the U.S.-directed sales of the same engine model for outboard or personal watercraft engines.

(e) You may not generate evaporative credits based on permeation measurements from metal fuel tanks or portable marine fuel tanks.

(f) You may not use emission credits generated under this subpart to offset any emissions that exceed an FEL or standard. This applies for all testing, including certification testing, in-use testing, selective enforcement audits, and other production-line testing. However, if exhaust emissions from an engine exceed an exhaust FEL or standard (for example, during a selective enforcement audit), you may use emission credits to recertify the family with a higher FEL that applies only to future production.

(g) Emission credits may be used for averaging in the model year they are generated or banked for averaging in future model years, except that CO emission credits for outboard and personal watercraft engines may not be banked or traded.

(h) You may increase or decrease an exhaust FEL during the model year by amending your application for certification under § 1045.225.

(i) Engine and vessel manufacturers certifying with respect to evaporative emissions may use emission credits to demonstrate compliance under this subpart. Component manufacturers may establish FELs for their certified products, but they may not generate or use emission credits under this subpart.

(j) In your application for certification, base your showing of compliance on projected production volumes for engines or vessels intended for sale in the United States. As described in § 1045.730, compliance with the requirements of this subpart is determined at

the end of the model year based on actual production volumes for engines or vessels intended for sale in the United States. Do not include any of the following engines or vessels to calculate emission credits:

(1) Engines or vessels exempted under subpart G of this part or under 40 CFR part 1068.

(2) Engines or vessels intended for export.

(3) Engines or vessels that are subject to state emission standards for that model year. However, this restriction does not apply if we determine that the state standards and requirements are equivalent to those of this part and that products sold in such a state will not generate credits under the state program. For example, you may not include engines or vessels certified for California if California has more stringent emission standards for these products or if your products generate or use emission credits under the California program.

(4) Engines or vessels not subject to the requirements of this part, such as those excluded under § 1045.5.

(5) Any other engines or vessels where we indicate elsewhere in this part 1045 that they are not to be included in the calculations of this subpart.

[73 FR 59194, Oct. 8, 2008, as amended at 75 FR 23020, Apr. 30, 2010]

§ 1045.705 How do I generate and calculate exhaust emission credits?

The provisions of this section apply for calculating exhaust emission credits for HC+NO_x or CO. You may generate exhaust emission credits only if you are a certifying engine manufacturer.

(a) For each participating family, calculate positive or negative emission credits relative to the otherwise applicable emission standard. Calculate positive emission credits for a family that has an FEL below the standard. Calculate negative emission credits for a family that has an FEL above the standard. Sum your positive and negative credits for the model year before rounding. Round the sum of emission credits to the nearest kilogram (kg) using consistent units throughout the following equation:

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$$\text{Emission credits (kg)} = (\text{STD} - \text{FEL}) \times (\text{Volume}) \times (\text{Power}) \times (\text{UL}) \times (\text{LF}) \times (10^{-3})$$

Where:

STD = the emission standard, in g/kW-hr.

FEL = the family emission limit for the family, in g/kW-hr.

Volume = the number of engines eligible to participate in the averaging, banking, and trading program within the given family during the model year, as described in § 1045.701(j).

Power = maximum engine power for the family, in kilowatts (*see* § 1045.140).

UL = The useful life for the given family.

LF = load factor. Use 0.207. We may specify a different load factor if we approve the use of special test procedures for an engine family under 40 CFR 1065.10(c)(2), consistent with good engineering judgment.

(b) [Reserved]

[73 FR 59194, Oct. 8, 2008, as amended at 75 FR 23020, Apr. 30, 2010]

§ 1045.706 How do I generate and calculate evaporative emission credits?

The provisions of this section apply for calculating evaporative emission credits. This applies only for fuel tank permeation. You may generate credits only if you are a certifying vessel manufacturer. This may include outboard engine manufacturers if they install under-cowl fuel tanks.

(a) For each participating vessel, calculate positive or negative emission credits relative to the otherwise applicable emission standard. Calculate positive emission credits for a family that has an FEL below the standard. Calculate negative emission credits for a family that has an FEL above the standard. Sum your positive and negative credits for the model year before rounding. Round the sum of emission credits to the nearest kilogram (kg) using consistent units throughout the following equation:

$$\text{Emission credits (kg)} = (\text{STD} - \text{FEL}) \times (\text{Total Area}) \times (\text{UL}) \times (\text{AF}) \times (365) \times (10^{-3})$$

Where:

STD = the emission standard, in g/m²/day.

FEL = the family emission limit for the family, in g/m²/day, as described in paragraph (b) of this section.

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Total Area = The combined internal surface area of all fuel tanks in the family, in m².

UL = 5 years, which represents the useful life for the given family.

AF = adjustment factor. Use 1.0 for fuel tank testing performed at 28 °C and 0.60 for testing performed at 40 °C.

(b) For calculating credits under paragraph (a) of this section, the emission standard and FEL must both be based on test measurements at the same temperature (28 ° or 40 °C). Determine the FEL for calculating emission credits (relative to testing at 28 °C) as follows:

(1) To use an FEL below 5.0 g/m²/day, it must be based on emission measurements.

(2) The provisions of this paragraph (b)(2) apply for all emission families with FELs at or above 5.0 g/m²/day. To calculate emission credits for such emission families, you must choose from one of the following options and apply it to all your emission families with FELs at or above 5.0 g/m²/day:

(i) Option 1: Establish all your FELs based on emission measurements. This may include measurements from a certifying fuel tank manufacturer.

(ii) Option 2: Use an assigned FEL of 10.4 g/m²/day. This would apply without regard to whether any of these emission families have measured emission levels below 10.4 g/m²/day. If any of your fuel tanks were otherwise certified (by you or the fuel tank manufacturer) with an FEL between 5.0 and 10.4 g/m²/day, the assigned FEL of 10.4 g/m²/day applies only for emission credit calculations.

§ 1045.710 How do I average emission credits?

(a) Averaging is the exchange of emission credits among your families. You may average emission credits only within the same averaging set.

(b) You may certify one or more families to an FEL above the emission standard, subject to the FEL caps and other provisions in subpart B of this part, if you show in your application for certification that your projected balance of all emission-credit transactions in that model year is greater than or equal to zero.

(c) If you certify a family to an FEL that exceeds the otherwise applicable